

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for ~~designing a resin product~~obtaining resin product design parameters for use in an event of designing a resin product to be molded by injection molding, the method comprising the steps of: ~~determining~~obtaining a mold clamping force required for conducting injection molding of a resin product having a specified shape using a computer-aided optimization method; and ~~determining~~obtaining the design of said resin product based on the thus obtained mold clamping force.

2. (currently amended): The method for obtaining resin product design parameters~~designing a resin product~~ according to Claim 1, in which a process parameter for determining an inflow of a resin material from a plurality of resin inflow conduits connecting with a cavity is used as a variable parameter for determining said mold clamping force.

3. (currently amended): The method for obtaining resin product design parameters~~designing a resin product~~ according to Claim 2, wherein said process parameter is a parameter which controls actions of inflow regulation valves located at said plurality of resin inflow conduits.

4. (currently amended): The method for obtaining resin product design parameters~~designing a resin product~~ according to Claim 3, wherein said inflow regulation valve is a valve gate.

5. (currently amended): The method for obtaining resin product design parameters~~designing a resin product~~ according to Claim 4, wherein said valve gate is controlled by choosing either full opening or full closing.

6. (currently amended): The method for obtaining resin product design parameters~~designing a resin product~~ according to Claim 4, wherein process parameters are optimized under the condition where at least one of the valve gates is opened at any spot of time during filling stage.

7. (currently amended): The method for obtaining resin product design parameters~~designing a resin product~~ according to Claim 1, wherein resin material for molding is thermoplastic resin.

8. (currently amended): The method for obtaining resin product design parameters~~designing a resin product~~ according to Claim 1, wherein resin material for molding is polypropylene-base resin.

9. (currently amended): The method for obtaining resin product design parameters~~designing a resin product~~ according to Claim 1, wherein resin material for molding is low flow resin.

10. (currently amended): The method for obtaining resin product design parameters~~designing a resin product~~ according to Claim 1, wherein the material of the product is determined based on the mold clamping force determined by an optimization method.

11. (currently amended): The method for obtaining resin product design parameters~~designing a resin product~~ according to Claim 1, wherein the thickness distribution of the product is determined based on the mold clamping force determined by an optimization method.

12. (currently amended): The method for obtaining resin product design parameters~~designing a resin product~~ according to Claim 1, wherein the thickness distribution of the product is determined by an optimization method under constraint conditions for the mold clamping force.

13. (original): A method for producing of a resin product, the method comprising a step of molding a resin product designed in the method for designing a resin product according to Claim 1 through injection molding under an optimized condition.

14. (original): An injection molding device comprising:

a molding device main body which feeds a molten resin to a mold having a plurality of resin inflow conduits to a cavity therethrough;

a memory section which memorizes molding parameters determined by a computer-aided optimization method; and

a control section which conducts injection molding while controlling said molding device main body based on molding parameters corresponding to a predetermined mold clamping force.